

# RAND Research Brief

## Federal Impact Aid Fair and Effective?

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When the children of military servicemembers go to a local school, the federal government provides the school district a subsidy. This occurs because the military members do not contribute to the local tax base in the same proportion that local residents do. The funding is not insignificant, amounting to almost a billion dollars in fiscal year 2000. However, some argue that the subsidy provided is inadequate to offset the higher costs incurred by educating the additional students. Researchers from RAND's National Defense Research Institute analyzed the Impact Aid program, paying special attention to its effect on the children of members of the armed forces. Their analysis, published in *Impact Aid and the Education of Military Children*, leads them to conclude the following:

- The complex Impact Aid formula results in large payment disparities for the same type of students.
- Differences in how school districts are defined makes the link between them and reimbursements inherently flawed.
- Educational opportunities for military and civilian children appear roughly comparable.
- Concern over the extra cost of military children may be misplaced.
- Military children have a much higher migration rate than do civilian children.

### THE IMPACT AID FORMULAS

The rationale underpinning the Impact Aid program, which is administered by the Department of Education, is straightforward: Military servicemembers use local schools but do not contribute to the tax base at the same rate as residents. Two formulas determine the amount of the subsidy. One formula calculates a pro-rata basic support payment for different types of students. In this formula, an on-base student is assigned a weight of 1.0,

while a student who lives off base receives a weight of 0.1.<sup>1</sup> These weights reflect the fact that on-base families occupy federal land, which local jurisdictions cannot tax. However, because the Impact Aid program typically is not fully funded, a second formula is invoked. The learning opportunity threshold (LOT) formula rations available funds across school districts based on the share of federally sponsored students in a given district. The logic is to provide a greater subsidy to the districts most affected.

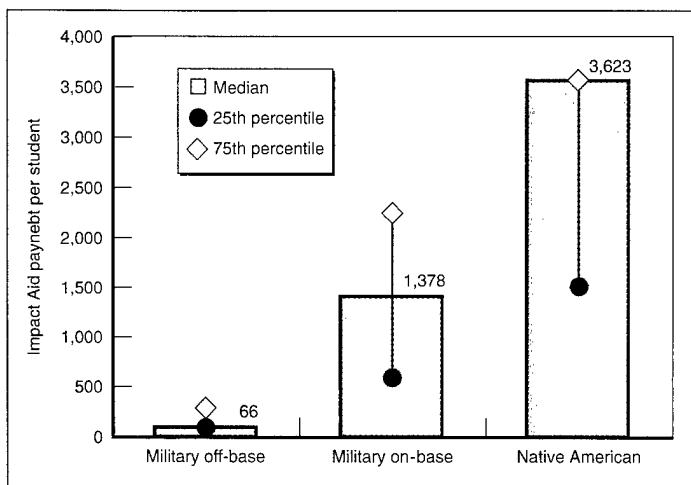
### HOW THE FORMULAS AFFECT REIMBURSEMENT

The LOT formula dramatically redistributes the subsidy calculated under the basic support formula, shifting it to the districts that have dense concentrations of federally connected students, particularly those that have a lot of children who have high weights in the formula (i.e., those living on base or on Native American lands).

The LOT formula produces wide ranges of reimbursements between and within each group of students. For example, as the figure on the back shows, the typical reimbursement for a Native American child is \$3,623, while the reimbursements for an on-base and off-base military child are \$1,378 and \$66, respectively. The nominal weights in the law suggest that the reimbursement for a Native American child would be 1.25 times that for an on-base military child, but the LOT formula inflates the ratio to 2.63. Similarly, the reimbursement for a typical off-base child is not one-tenth of the on-base child, but rather only one-twentieth. Looking within groups, reimbursements for the highest quartile of payments for on-base military children exceed \$2,275 compared with less than \$536 for

<sup>1</sup> Children of military members are not the only ones who generate a subsidy. For example, Native American children do also, and they have a relatively higher weighting in the formula (1.25).

those in the lowest quartile. Similarly, a payment for an on-base child at the 75th percentile is \$128 compared with only \$36 at the 25th percentile.



*Reimbursements for Federally Connected Students*

The interaction between the two formulas hinges on three features. One is the number of military children. About 80 percent of the military children are in the 116 school districts that have more than 1,000 military children each. The remaining military children are spread across 602 districts. A second feature is the share of military students. Military members tend to concentrate in a few districts, so their share of the school district is high. Finally, the mix of on- and off-base students matters. Most military students (63 percent) live off base. The LOT formula penalizes school districts with a low share of military children, and it penalizes off-base students, directly through the weighting and indirectly through the adjustment. An inherent problem with the subsidy formulas is that they are tied to how the school district is defined, and the definitions are inconsistent across states. For example, the reimbursement for an on-base student in Florida is \$625 compared with \$1,970 in Texas, and the funding gap is driven primarily by Florida's having county-level districts, while Texas has small ones. The taxpayers of Florida may

be able to make up for this shortfall in funding, but the funding policy punishes them unfairly for the way the state defines district boundaries.

## DO THE CHILDREN OF THE MILITARY ADD A BURDEN?

How do the education resources available to military children compare with those available for similar children whose parents have civilian employment? The analysis examined whether the presence or share of military students strains local schooling resources and creates a "burden" for the districts. Using a multivariate model that enables researchers to isolate the effects of military-related students, researchers determined that expenditures per pupil and teacher-pupil ratios do not vary significantly with the district's share of on-base students. Analysis suggests that off-base students may be imposing an added burden, which may affect the quality of education. The additional strain on resources is small, however, so the effect should be modest.

The report also examined whether the cost of educating a servicemember's child is more or less than that of a typical public school student. The evidence suggests that these students may impose some extra costs, but these costs may not be large. In other respects, however, military children may have below-average costs, so the net effect is unclear. Children of military members move three times more often than do their counterparts, which presumably increases testing and counseling costs. They participate in the free or reduced-cost lunch program at lower rates than their civilian peers do, and the eligibility of military children for these programs is more a reflection of the unique military compensation system that provides "free" on-base housing than it is one of economic need. Available evidence suggests that military children are above-average students, as the backgrounds of their parents would suggest (e.g., high school graduates, intact husband-wife households). Also, fewer military children are enrolled in special education programs.

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*RAND research briefs summarize research that has been more fully documented elsewhere. This research brief describes work done in the Forces and Resources Policy Center of RAND's National Defense Research Institute; it is documented in Impact Aid and the Education of Military Children, by Richard Buddin, Brian P. Gill, and Ron W. Zimmer, MR-1272-OSD, 2001, 102 pp., \$15.00, ISBN: 0-8330-2964-9, available from RAND Distribution Services (Telephone: toll free 877-584-8642; FAX: 310-451-6915; or e-mail: [order@rand.org](mailto:order@rand.org)). Abstracts of all RAND documents may be viewed on the World Wide Web (<http://www.rand.org>). Publications are distributed to the trade by NBN. RAND® is a registered trademark. RAND is a nonprofit institution that helps improve policy and decisionmaking through research and analysis; its publications do not necessarily reflect the opinions or policies of its research sponsors.*

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